



ENTERED

1642

RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/925,664

DATE: 03/05/2001

TIME: 14:00:50

Input Set : A:\06499-1.txt

Output Set: N:\CRF3\03052002\I925664.raw

3 <110> APPLICANT: Denney, Jr., Dan W.
 5 <120> TITLE OF INVENTION: Methods of Treating Lymphoma and Leukemia
 7 <130> FILE REFERENCE: GENITOP-06499
 9 <140> CURRENT APPLICATION NUMBER: 09/925,664
 10 <141> CURRENT FILING DATE: 2001-08-09
 12 <150> PRIOR APPLICATION NUMBER: 09/370,453
 13 <151> PRIOR FILING DATE: 1999-08-09
 15 <150> PRIOR APPLICATION NUMBER: 08/644,664
 16 <151> PRIOR FILING DATE: 1996-05-01
 18 <150> PRIOR APPLICATION NUMBER: 08/761,277
 19 <151> PRIOR FILING DATE: 1996-12-06
 21 <160> NUMBER OF SEQ ID NOS: 80
 23 <170> SOFTWARE: PatentIn version 3.1

25 <210> SEQ ID NO: 1
 26 <211> LENGTH: 28
 27 <212> TYPE: DNA
 28 <213> ORGANISM: Artificial Sequence
 30 <220> FEATURE:
 31 <223> OTHER INFORMATION: Synthetic

33 <400> SEQUENCE: 1
 34 tctagagcgg ccgcggaggc cgaattcg
 37 <210> SEQ ID NO: 2
 38 <211> LENGTH: 36
 39 <212> TYPE: DNA
 40 <213> ORGANISM: Artificial Sequence
 42 <220> FEATURE:
 43 <223> OTHER INFORMATION: Synthetic

45 <400> SEQUENCE: 2
 46 gatccgaatt cggcctccgc ggccgctcta gatgca
 49 <210> SEQ ID NO: 3
 50 <211> LENGTH: 677
 51 <212> TYPE: DNA
 52 <213> ORGANISM: SV40 Poly A
 54 <400> SEQUENCE: 3

55 ggatccagac atgataagat acattgatga gtttggacaa accacaacta gaatgcagtg 60
 57 aaaaaaatgc tttattttgtg aaattttgtg tgctatttgc ttattttgtaa ccattataag 120
 59 ctgcaataaa caagttaaca acaacaattg cattcatttt atgtttcagg ttcaggggga 180
 61 ggtgtgggag gtttttttaa gcaagtaaaa cctctacaaa tgtggtatgg ctgattatga 240
 63 tcatgaacag actgtgagga ctgaggggccc tgaaatgagc cttgggactg tgaatcaatg 300
 65 cctgtttcat gccctgagtc ttccatgttc ttctcccccac catcttcatt tttatcagca 360
 67 ttttcctggc tgtcttcac atcatcatca ctgtttctta gccaatctaa aactccaatt 420
 69 cccatagcca cattaaactt catttttttga tacactgaca aactaaactc tttgtccaat 480
 71 ctctctttcc actccacaat tctgctctga atactttgag caaactcagc cacagggtctg 540

RECEIVED

APR 04 2002

TECH CENTER 1600/2900 28

RAW SEQUENCE LISTING

DATE: 03/05/2002

PATENT APPLICATION: US/09/925,664

TIME: 14:00:50

Input Set : A:\06499-1.txt

Output Set: N:\CRF3\03052002\I925664.raw

```

73 taccaaatta acataagaag caaagcaatg ccactttgaa ttattctctt ttctaacaaa      600
75 aactcactgc gttccaggca atgcttttaa taatctttgg gcctaaaaatc tatttgtttt      660
77 acaaactctgg cctgcag                                           677
80 <210> SEQ ID NO: 4
81 <211> LENGTH: 39
82 <212> TYPE: DNA
83 <213> ORGANISM: Artificial Sequence
85 <220> FEATURE:
86 <223> OTHER INFORMATION: Synthetic
88 <400> SEQUENCE: 4
89 ctagaattca cgcgtaggcc tccgcggccg cgcgcatgc                               39
92 <210> SEQ ID NO: 5
93 <211> LENGTH: 39
94 <212> TYPE: DNA
95 <213> ORGANISM: Artificial Sequence
97 <220> FEATURE:
98 <223> OTHER INFORMATION: Synthetic
100 <400> SEQUENCE: 5
101 aattgcatgc gcgcggccgc ggaggcctac gcgtgaatt                             39
104 <210> SEQ ID NO: 6
105 <211> LENGTH: 633
106 <212> TYPE: DNA
107 <213> ORGANISM: SR alpha promoter
109 <400> SEQUENCE: 6
110 caagcttgct gtggaatgtg tgtcagttag ggtgtggaaa gtccccaggc tccccagcag      60
112 gcagaagtat gcaaagcatg catctcaatt agtcagcaac caggtgtgga aagtccccag      120
114 gctccccagc aggcagaagt atgcaaagca tgcattctcaa ttagtcagca accatagtcc      180
116 cgcccctaac tccgcccatc ccgccctaa ctccgccag ttccgccat tctccgcccc      240
118 atggctgact aatttttttt atttatgcag aggccgaggc cgctcggcc tctgagctat      300
120 tccagaagta gtgaggaggc ttttttgag gcctaggctt ttgcaaaaag ctctcgagc      360
122 tcgcatctct cttcacgcg ccgcgccccc tacctgaggc cgccatccac gccggttgag      420
124 tcgcgttctg ccgcctcccg cctgtggtgc ctctgaact gcgtccgccg tctaggtaag      480
126 tttagagctc aggtcgagac cgggcctttg tccggcgctc cttggagcc tacctagact      540
128 cagccggctc tccacgcttt gcctgaccct gcttgctcaa ctctacgtct ttgtttcgtt      600
130 ttctgttctg cgccgttaca gatcgctcg agg                                           633
133 <210> SEQ ID NO: 7
134 <211> LENGTH: 635
135 <212> TYPE: DNA
136 <213> ORGANISM: Moloney LTR virus
138 <400> SEQUENCE: 7
139 caagcttcg attagtccaa tttgttaaag acaggatatt agtgggccag gctctagttt      60
141 tgactcaaca atatcaccag ctgaagccta tagagtacga gccatagata aaataaaaaga      120
143 ttttattttag tctccagaaa aaggggggaa tgaaaagacc cacctgtagg tttggcaagc      180
145 tagcttaagt aacgccattt tgcaaggcat ggaaaaatac ataactgaga atagagaagt      240
147 tcagatcaag gtcaggaaca gatggaacag ctgaatatgg gccaaacagg atatctgtgg      300
149 taagcagttc ctgcccgggc tcagggccaa gaacagatgg aacagctgaa tatgggccaa      360
151 acaggatatt tgtggtaagc agttcctgcc ccggtcaggg gccaaagaaca gatgggtccc      420
153 agatgcggtc cagccctcag cagtttctag agaaccatca gatgtttcca gggtgcccca      480
155 aggacctgaa atgacctgtg gccttatttg aactaaccaa tcagttcgct tctcgcttct      540

```

RAW SEQUENCE LISTING

DATE: 03/05/2002

PATENT APPLICATION: US/09/925,664

TIME: 14:00:50

Input Set : A:\06499-1.txt

Output Set: N:\CRF3\03052002\I925664.raw

```

157 gttcgcgcgc tttctgctccc cgagctcaat aaaagagccc acaacccctc actcggggcg 600
159 ccagtcctcc gattgactga gtcgccccct cgagg 635
162 <210> SEQ ID NO: 8
163 <211> LENGTH: 483
164 <212> TYPE: DNA
165 <213> ORGANISM: Homo sapiens
167 <400> SEQUENCE: 8
168 aagctttgga gctaagccag caatggtaga gggaagattc tgcacgtccc ttccaggcgg 60
170 cctccccgtc accaccccc ccaaccgcc ccgaccggag ctgagagtaa ttcatacaaa 120
172 aggactcgcc cctgccttgg ggaatcccag ggaccgtcgt taaactccca ctaacgtaga 180
174 acccagagat cgctgcgttc ccgccccctc acccgccgc tctcgtcatc actgagggtg 240
176 agaagagcat gcgtgaggct ccggtgccc gtcagtgggca gagcgcacat cgcccacagt 300
178 ccccgagaag ttgggggggag gggtcggcaa ttgaaccggg gcctagagaa ggtggcgcg 360
180 ggtaaaactg gaaagtgatg tcgtgtactg gctccgcctt tttcccgagg gtgggggaga 420
182 accgtatata agtgcagtag tcgccgtgaa cgttctttt cgcaacgggt ttgccgcctc 480
184 gag 483
187 <210> SEQ ID NO: 9
188 <211> LENGTH: 24
189 <212> TYPE: DNA
190 <213> ORGANISM: Artificial Sequence
192 <220> FEATURE:
193 <223> OTHER INFORMATION: Synthetic
195 <400> SEQUENCE: 9
196 aagctttgga gctaagccag caat 24
199 <210> SEQ ID NO: 10
200 <211> LENGTH: 23
201 <212> TYPE: DNA
202 <213> ORGANISM: Artificial Sequence
204 <220> FEATURE:
205 <223> OTHER INFORMATION: Synthetic
207 <400> SEQUENCE: 10
208 ctcgaggcgg caaacccgtt gcg 23
211 <210> SEQ ID NO: 11
212 <211> LENGTH: 1451
213 <212> TYPE: DNA
214 <213> ORGANISM: Homo sapiens
216 <400> SEQUENCE: 11
217 aagctttgga gctaagccag caatggtaga gggaagattc tgcacgtccc ttccaggcgg 60
219 cctccccgtc accaccccc ccaaccgcc ccgaccggag ctgagagtaa ttcatacaaa 120
221 aggactcgcc cctgccttgg ggaatcccag ggaccgtcgt taaactccca ctaacgtaga 180
223 acccagagat cgctgcgttc ccgccccctc acccgccgc tctcgtcatc actgagggtg 240
225 agaagagcca tgcgtgaggc tccggtgccc gtcagtgggc agagcgcaca tcgcccacag 300
227 tccccgagaa gttgggggga ggggtcggca attgaaccgg tgcctagaga aggtggcgcg 360
229 gggtaaaactg ggaaagtgat gtcgtgtact ggctccgcct ttttcccgag ggtgggggag 420
231 aaccgtata taagtgcagt agtcgccgtg aacgttctt ttcgcaacgg gtttgccgcc 480
233 agaacacagg taagtgcgt gtgtggttcc cgcgggcctg gcctctttac gggttatggc 540
235 ccttgcgtgc cttgaattac ttccacgcc ctggctgcag tacgtgattc ttgatcccga 600
237 gcttcggggtt ggaagtgggt gggagagttc gaggccttg gcttaaggag ccccttcgcc 660
239 tcgtgcttga gttgaggcct ggcctgggcg ctggggcccc cgcgtcgcaa tctggtggca 720

```

RAW SEQUENCE LISTING

DATE: 03/05/2002

PATENT APPLICATION: US/09/925,664

TIME: 14:00:50

Input Set : A:\06499~1.txt

Output Set: N:\CRF3\03052002\I925664.raw

```

241 ccttcgcgcc tgtctcgcgtg ctttcgataa gtctctagcc atttaaaatt tttgatgacc 780
243 tgctgcgacg ctttttttct ggcaagatag tcttgtaaatt gcgggccaag atctgcacac 840
245 tggattttcg gtttttgggg ccgcgggcgg cgacggggcc cgtgcgtccc agcgcacatg 900
247 ttcggcgagg cggggcctgc gagcgcggcc accgagaatc ggacgggggt agtctcaagc 960
249 tggccggcct gctctggtgc ctggcctcgc gccgccgtgt atcgccccgc cctgggcggc 1020
251 aaggctggcc cggtcggcac cagttgcgtg agcggaaaga tggccgcttc ccggccctgc 1080
253 tgcagggagc tcaaaatgga ggacgcggcg ctccgggagag cgggcgggtg agtcacccac 1140
255 acaaaggaaa agggcccttc cgtcctcagc cgtcgcttca tgtgactcca cggagtaccg 1200
257 ggcccgctcc aggcacctcg attagtcttc gagcttttgg agtacgtcgt ctttaggttg 1260
259 gggggagggg ttttatgcga tggagtttcc ccacactgag tgggtggaga ctgaagttag 1320
261 gccagcttgg cacttgatgt aattctcctt ggaatttgcc ctttttgagt ttggatcttg 1380
263 gttcattctc aagcctcaga cagtgggttca aagttttttt cttccatttc aggtgtcgtg 1440
265 aaaactctag a 1451
268 <210> SEQ ID NO: 12
269 <211> LENGTH: 23
270 <212> TYPE: DNA
271 <213> ORGANISM: Artificial Sequence
273 <220> FEATURE:
274 <223> OTHER INFORMATION: Synthetic
276 <400> SEQUENCE: 12
277 tctagagttt tcacgacacc tga 23
280 <210> SEQ ID NO: 13
281 <211> LENGTH: 1289
282 <212> TYPE: DNA
283 <213> ORGANISM: Mus musculus
285 <220> FEATURE:
286 <221> NAME/KEY: CDS
287 <222> LOCATION: (88)..(741)
288 <223> OTHER INFORMATION:
291 <400> SEQUENCE: 13
292 ttacctcaact gctttccgga gcggtagcac ctctcccgcc ggcttccctcc tcagaccgct 60
294 ttttgccgcg agccgaccgg tcccgtc atg ccg acc cgc agt ccc agc gtc gtc 114
295 Met Pro Thr Arg Ser Pro Ser Val Val
296 1 5
298 att agc gat gat gaa cca ggt tat gac cta gat ttg ttt tgt ata cct 162
299 Ile Ser Asp Asp Glu Pro Gly Tyr Asp Leu Asp Leu Phe Cys Ile Pro
300 10 15 20 25
302 aat cat tat gcc gag gat ttg gaa aaa gtg ttt att cct cat gga ctg 210
303 Asn His Tyr Ala Glu Asp Leu Glu Lys Val Phe Ile Pro His Gly Leu
304 30 35 40
306 att atg gac agg act gaa aga ctt gct cga gat gtc atg aag gag atg 258
307 Ile Met Asp Arg Thr Glu Arg Leu Ala Arg Asp Val Met Lys Glu Met
308 45 50 55
310 gga ggc cat cac att gtg gcc ctc tgt gtg ctc aag ggg ggc tat aag 306
311 Gly Gly His His Ile Val Ala Leu Cys Val Leu Lys Gly Gly Tyr Lys
312 60 65 70
314 ttc ttt gct gac ctg ctg gat tac att aaa gca ctg aat aga aat agt 354
315 Phe Phe Ala Asp Leu Leu Asp Tyr Ile Lys Ala Leu Asn Arg Asn Ser
316 75 80 85

```

RAW SEQUENCE LISTING

DATE: 03/05/2002

PATENT APPLICATION: US/09/925,664

TIME: 14:00:50

Input Set : A:\06499-1.txt

Output Set: N:\CRF3\03052002\I925664.raw

```

318 gat aga tcc att cct atg act gta gat ttt atc aga ctg aag agc tac      402
319 Asp Arg Ser Ile Pro Met Thr Val Asp Phe Ile Arg Leu Lys Ser Tyr
320 90                      95                      100                      105
322 tgt aat gat cag tca acg ggg gac ata aaa gtt att ggt gga gat gat      450
323 Cys Asn Asp Gln Ser Thr Gly Asp Ile Lys Val Ile Gly Gly Asp Asp
324                      110                      115                      120
326 ctc tca act tta act gga aag aat gtc ttg att gtt gaa gat ata att      498
327 Leu Ser Thr Leu Thr Gly Lys Asn Val Leu Ile Val Glu Asp Ile Ile
328                      125                      130                      135
330 gac act ggt aaa aca atg caa act ttg ctt tcc ctg gtt aag cag tac      546
331 Asp Thr Gly Lys Thr Met Gln Thr Leu Leu Ser Leu Val Lys Gln Tyr
332                      140                      145                      150
334 agc ccc aaa atg gtt aag gtt gca agc ttg ctg gtg aaa agg acc tct      594
335 Ser Pro Lys Met Val Lys Val Ala Ser Leu Leu Val Lys Arg Thr Ser
336                      155                      160                      165
338 cga agt gtt gga tac agg cca gac ttt gtt gga ttt gaa att cca gac      642
339 Arg Ser Val Gly Tyr Arg Pro Asp Phe Val Gly Phe Glu Ile Pro Asp
340 170                      175                      180                      185
342 aag ttt gtt gtt gga tat gcc ctt gac tat aat gag tac ttc agg aat      690
343 Lys Phe Val Val Gly Tyr Ala Leu Asp Tyr Asn Glu Tyr Phe Arg Asn
344                      190                      195                      200
346 ttg aat cac gtt tgt gtc att agt gaa act gga aaa gcc aaa tac aaa      738
347 Leu Asn His Val Cys Val Ile Ser Glu Thr Gly Lys Ala Lys Tyr Lys
348                      205                      210                      215
350 gcc taagatgagc gcaagttgaa tctgcaaata cgaggagtcc tgttgatggt      791
351 Ala
354 gccagtaaaa tttagcaggtg ttctagtcct gtggccatct gcctagtaaa gcttttttgca      851
356 tgaacctttct atgaatgta ctgtttttatt tttagaaaatg tcagtttgctg cgtccccaga      911
358 ctttttgattt gcactatgag cctataggcc agcctaccct ctggttagatt gtcgcttatc      971
360 ttgtaagaaa aacaaatctc ttaaattacc actttttaaat aataataactg agattgtatc      1031
362 tgtaagaagg atttaagag aagctatatt agtttttttaa ttggtatttt aattttttata      1091
364 tattcaggag agaaagatgt gattgatatt gttaatttag acgagtctga agctctcgat      1151
366 ttcctatcag taacagcatc taagaggttt tgctcagtg aataaacatg tttcagcagt      1211
368 gttggctgta ttttcccact ttcagtaaat cgttgtcaac agttcctttt aaatgcaaat      1271
370 aaataaattc taaaaatt                                     1289
373 <210> SEQ ID NO: 14
374 <211> LENGTH: 218
375 <212> TYPE: PRT
376 <213> ORGANISM: Mus musculus
378 <400> SEQUENCE: 14
380 Met Pro Thr Arg Ser Pro Ser Val Val Ile Ser Asp Asp Glu Pro Gly
381 1                      5                      10                      15
384 Tyr Asp Leu Asp Leu Phe Cys Ile Pro Asn His Tyr Ala Glu Asp Leu
385                      20                      25                      30
388 Glu Lys Val Phe Ile Pro His Gly Leu Ile Met Asp Arg Thr Glu Arg
389                      35                      40                      45
392 Leu Ala Arg Asp Val Met Lys Glu Met Gly Gly His His Ile Val Ala
393                      50                      55                      60
396 Leu Cys Val Leu Lys Gly Gly Tyr Lys Phe Phe Ala Asp Leu Leu Asp

```

Use of n and / or Xaa has been detected in the Sequence Listing. Review the Sequence Listing to ensure a corresponding explanation is present in the <220> to <223> fields of each sequence using n or Xaa.

VERIFICATION SUMMARY

PATENT APPLICATION: US/09/925,664

DATE: 03/05/2002

TIME: 14:00:51

Input Set : A:\06499~1.txt

Output Set: N:\CRF3\03052002\I925664.raw

L:1988 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:80